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REMARKS

This response is intended as a full and complete response to the final Office Action mailed September 5, 2006. In the Office Action, the Examiner notes that claims 1-9 are pending of which claims 1-3 are withdrawn from consideration, claims 4-6, 8 and 9 are rejected, and claim 7 is objected to.

In view of the following discussion, Applicants submit that none of the claims now pending in the application are anticipated or obvious under the respective provisions of 35 U.S.C. §§102, and 103. Further, Applicants submit that all of the claims comply with the written description requirement of 35 U.S.C. §112. Thus, Applicants believe that all of these claims are now in allowable form.

It is to be understood that Applicants, by amending the claims, do not acquiesce to the Examiner's characterizations of the art of record or to Applicants' subject matter recited in the pending claims. Further, Applicants are not acquiescing to the Examiner's statements as to the applicability of the prior art of record to the pending claims by filing the instant response.

REJECTIONS

35 U.S.C. §112

The Examiner has rejected claim 9 under 35 U.S.C. §112, ¶1, as failing to comply with the written description requirement. Applicants respectfully traverse the Examiner's rejection.

In the Office Action, the Examiner argues that the sending of first and second identification information is described with respect to Applicants' Figure 5, while support for the limitation of a session between a headend and a subscriber device being one of a UDP session or a TCP session is only described in Applicants' specification with respect to Figures 6 and 7. As such, the Examiner concludes that there is no support for Applicants' limitation with respect to the type of session established. Applicants respectfully disagree.

Applicants respectfully submit that Applicants' Figure 5 is a general method of one embodiment of Applicants' invention, while Applicants' Figures 6 and 7 are more detailed examples of embodiments of Applicants' invention. Thus, Applicants submit

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that the description of the session between a headend and a subscriber device being a UDP session or a TCP session, although described within the context of the more specific embodiments of Figure 6 and Figure 7, is clearly applicable to the more general embodiment of Figure 5, on which the embodiments of Figure 6 and Figure 7 are based. This is evident from at least the following portion of Applicants' specification as originally filed:

"Referring now to Figures 5-7, the methods of the present invention for sending and using a Logical Node ID signal as part of streaming data will be described in more detail. The general method will first be discussed with reference to Figure 5. Then a method for using the Logical Node ID to determine the appropriate channel on which to transmit a requested program is described in two embodiment with reference to Figures 6 and 7." [Specification, Pg. 13, Lines 23-27, Emphasis added].

As such, Applicants submit that the description of the session as being a UDP session or a TCP session, although described in the context of Figures 6 and 7 of the Applicants' specification, clearly applies to the embodiment of Applicants' invention that is described within the context of Figure 5 of the Applicants' specification. Specifically, as described in Applicants' previous response, referring to, for example, the paragraph beginning at page 14, column 19 of Applicants' specification, it is stated that:

"Turning to Figure 6, at step 602, the user requests VOD by way of the corresponding subscriber station. At step 604, the subscriber station reads the Program Map Table (PMT) and at step 604 receives the periodic transmission of the Logical Node ID. At step 608, the IP address of the SCM, which is stored in the subscriber station and its listener port number are used to make a User Datagram Protocol (UDP or TCP - Transmission Control Protocol) connection between the SEM and the subscriber station. At step 610, the program transmission occurs until termination at step 612." [Emphasis added.]

As such, in view of at least the portions of Applicants' specification cited above, Applicants respectfully submit that there is sufficient support in Applicants' specification for the limitation of "wherein the session is selected from a User Datagram Protocol-based session and a Transmission Control Protocol-based session," as claimed in Applicants' claim 9.

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Therefore, Applicants respectfully request that the Examiner's rejection of claim 9 under 35 U.S.C. §112, ¶1 be withdrawn.

35 U.S.C. §102

The Examiner has rejected claims 4, 5, 8 and 9 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,295,298 B1 to Hraster et al. ("Hraster"). Applicants respectfully traverse the rejection.

Hraster is adapted to an asymmetrical network in which a high-bandwidth downlink (a CATV system) provides Internet information to subscribers, while a low-bandwidth uplink (a PSTN system) requests Internet information. More specifically, as taught in Hraster, a CATV headend 122 includes a modem pool 135 which is used to communicate with a low-bandwidth network; namely, PSTN 109. As further disclosed in Hraster, the modems of the modem pool 135 operate to receive, at the head end, IP addresses associated with desired data. The modems of the modem pool 135 then communicate to the subscribers (via the PSTN) the high-bandwidth pipe frequency that will include the information associated with an IP address.

Hraster, however, fails to teach or suggest each and every element of Applicants' invention of claim 4. Namely, Hraster fails to teach or suggest at least the limitation of "in response to receiving the first datastream at the subscriber device, using the first identification information in the first datastream to provide a second datastream for the headend having second identification information, the second identification information for routing communication to the subscriber device, providing the second datastream to the intermediate node, and providing the second datastream from the intermediate node to the headend," as claimed in Applicants' claim 4.

In the Office Action, the Examiner asserts that Hraster teaches providing a second datastream for the headend having second identification information for routing communication to the subscriber device. Specifically, the Examiner asserts that "[t]he second acknowledgment to communications manager 719 contains at least the RF modem 106's linkID as a second identification information." (Office Action, Pg. 5). Applicants respectfully disagree.

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Applicants respectfully submit that Hraster does not teach that the linkID of RF modem 106 is included in the acknowledgment IP packet sent from RF modem 106 to communications manager 102 (in step 719 in Figure 7 of Hraster). Rather, as taught in Hraster, the LinkID of RF modem 106 is included in a different acknowledgment (i.e., different than the acknowledgment IP packet that is sent at step 719). Specifically, the LinkID of RF modem 106 is included in the acknowledgment sent from communications manager 102 to RF modem 106 via cable 132 of the HFC network (in step 721 in Figure 7 of Hraster). In other words, as disclosed in Hraster, the LinkID is included in the downstream acknowledgment from communication manager 102 to RF modem 106, not in the upstream acknowledgment from RF modem 106 to communications manager 102. Specifically, Hraster states that:

"In other embodiments, RF modem 106(i) may further respond to the DHCP OFFER packet 715 by sending an acknowledgment IP packet via PSTN 109 and modem pool 135 to communications manager 102 (719). Communications manager 102 responds to the acknowledgment by sending an acknowledgment 721 on the cable 132 at the channel and pipe RF modem 106(i) is listening to. The acknowledgment contains at least RF modem 106(i)'s linkID."
[Hraster, Col. 18, Lines 59-67, Emphasis added.]

In other words, the cited portion of Hraster describes two acknowledgments. The first acknowledgment (at step 719) is an upstream acknowledgment from RF modem 106 to the headend (to communications manager 102) via PSTN 109. The second acknowledgment (at step 721) is a downstream acknowledgment from the headend (from communications manager 102) to RF modem 106 via cable 132 (i.e., via the HFC network rather than the PSTN). In the cited portion of Hraster, the statement that the acknowledgment contains RF modem 106's linkID clearly refers to the second acknowledgment (at step 721) from communications manager 102 to RF modem 106, not to the first acknowledgment (at step 719) from the RF modem 106 to communications manager 102.

Applicants further submit that, although at first glance it may appear that the statement in Hraster that "[t]he acknowledgment contains at least RF modem 106(i)'s linkID" may be in reference to either the upstream acknowledgment of step 719 or the downstream acknowledgment of step 721, this is clearly not the case. Applicants submit that it is abundantly clear that the statement in Hraster that "[t]he acknowledgment

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contains at least RF modem 106(i)'s linkID" refers to the downstream acknowledgment of step 721. As described in Hraster, the LinkID associated with an RF modem 106 is an identifier that is used by that RF modem 106 in order to identify packets intended for that RF modem 106 that are transmitted over cable 132. In other words, without inclusion of the LinkID in the downstream acknowledgment from communications manager 102 to RF modem 106, RF modem 106 will not receive the downstream acknowledgment from the communication manager 102 (because the RF modem 106 will not be able to discern that the acknowledgment is intended for RF modem 106). This is especially clear from at least the following portion of Hraster:

"Each superpacket 407 contains a header 409 and data 411. The header contains a link identifier (LinkID) 413 in cable network 132 for an RF modem 106. The number of superpackets 407 is the number of pipes in channel 403(i). When a given RF modem 106(i) is active, it is associated with a <channel,pipe,link ID> triple, that is, the RF modem 106(i) is tuned to the channel 403(i) specified in the triple and watches the superpackets that belong to the pipe specified in the triple. For example, if the RF modem is associated with pipe 3, it watches superpacket 407(3) in superframe 405, and if superpacket 407(3)'s header 409 contains RF modem 106(i)'s Link Id 413, RF modem 106(i) reads data 411 from superpacket 407(3). The <channel,pipe,linkID> triple is thus the link address of RF modem 106(i) on cable 132." [Hraster, Col. 7, Line 65 – Col. 8, Line 12, Emphasis added.]

In other words, it is clear from the cited portion of Hraster that the LinkID is used by the RF modem 106 with which it is associated for use in determining which packets that are transmitted over the HFC network (i.e., cable 132) should be read by that RF modem. Therefore, since the downstream acknowledgement that is transmitted from communications manager 102 to RF modem 106 at step 721 is transmitted over cable 132, that acknowledgment message must include the LinkID of the RF modem 106 in order for the acknowledgment to be identified by that RF modem 106.

A downstream acknowledgment from a headend to a subscriber device that includes a linkID associated with the subscriber device so that the subscriber device can identify the downstream acknowledgment, as taught in Hraster, is simply not a datastream provided in the upstream direction from a subscriber device to a headend that includes identification information for routing communication to the subscriber device, as claimed in Applicants' claim 4. Although Hraster does teach an upstream acknowledgment from RF modem 106 to communication manager 102, Hraster is

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completely devoid of any teaching or suggestion of any identification information being provided in the upstream acknowledgment IP packet sent from RF modem 106 to communication manager 102. Rather, Hraster merely includes a general statement that an acknowledgment IP packet may be provided from RF modem 106 to communication manager 102.

Thus, a linkID associated with a subscriber device (i.e., with RF modem 106) that is included in a downstream acknowledgment from a headend to a subscriber device, as taught in Hraster, is simply not identification information provided in an upstream datastream provided from a subscriber device to a headend via an intermediate node, as claimed in Applicants' claim 4. As such, Hraster fails to teach or suggest Applicants' limitations of "in response to receiving the first datastream at the subscriber device, using the first identification information in the first datastream to provide a second datastream for the headend having second identification information, the second identification information for routing communication to the subscriber device, providing the second datastream to the intermediate node, and providing the second datastream from the intermediate node to the headend," as claimed in Applicants' claim 4. Thus, Hraster fails to teach or suggest each and every element of Applicants' invention of claim 4.

As such, claim 4 is not anticipated by Hraster and is patentable under 35 U.S.C. §102. Moreover, claims 5, 8 and 9 depend, either directly or indirectly, from independent claim 4 and recite additional limitations thereof. As such and at least for the same reasons as discussed above, these dependent claims are also not anticipated by Hraster and are patentable under 35 U.S.C. §102.

35 U.S.C. §103

Claim 6

The Examiner has rejected claim 6 under 35 U.S.C. §103(a) as being unpatentable over Hraster in view of U.S. Patent No. 5,671,217 A to Adams et al. ("Adams"). Applicants respectfully traverse the rejection.

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Claim 6 depends indirectly from claim 4 and inherits the patentable subject matter of claim 4, while adding additional elements. For at least the reasons discussed above in Applicants' response to the Examiner's §102 rejection, Hratar fails to teach or suggest Applicants' invention of claim 4, as a whole.

Furthermore, Adams fails to bridge the substantial gap between Hratar and Applicants' invention. Adams discloses a scalable communications network employing shared logical nodes. Adams, however, fails to teach or suggest at least the limitations of "in response to receiving the first datastream at the subscriber device, using the first identification information in the first datastream to provide a second datastream for the headend having second identification information, the second identification information for routing communication to the subscriber device, providing the second datastream to the intermediate node, and providing the second datastream from the intermediate node to the headend," as claimed in Applicants' claim 4. As such, Adams, alone or in combination with Hratar, does not teach or suggest Applicants' invention of claim 4.

As such, claim 4, and claim 6 which depends indirectly from claim 4, are patentable under 35 U.S.C. §103(a) over Hratar and Adams. Therefore, Applicants respectfully request that the rejection be withdrawn.

ALLOWABLE SUBJECT MATTER

The Examiner states that claim 7 would be allowable if rewritten to overcome the claim objection in the Office Action and to include all of the limitations of the base claim and any intervening claims. Applicants thank the Examiner for indicating the allowable subject matter with respect to claim 7. However, in view of the arguments set forth, herein, Applicants believe that base claim 4 from which claim 7 depends is in allowable form and, as such, dependent claim 7, as it stands, is therefore in allowable condition. Accordingly, Applicants respectfully request that the foregoing objection to claim 7 be withdrawn.

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CONCLUSION

Thus, Applicants submit that all of the claims, presently in the application, are allowable. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

If, however, the Examiner believes that there are any unresolved issues requiring adverse final action in any of the claims now pending in the application, it is requested that the Examiner telephone Eamon J. Wall at (732) 530-9404 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,

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